

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/12794

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl.⁷ B61B13/06, B61B13/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int.Cl.⁷ B61B13/06, B61B13/04

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Jitsuyo Shinan Koho 1926-1996 Toroku Jitsuyo Shinan Koho 1994-2003
Kokai Jitsuyo Shinan Koho 1971-2003 Jitsuyo Shinan Toroku Koho 1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| X Y | CD-ROM of the specification and drawings annexed to the request of Japanese Utility Model application no. 91212/1991(laid-open no. 42035/1993) (Meidensha Corp.), 08 June, 1993 (08.06.93), (Family: none) | 1-3, 9, 10 4-8 |
| Y | JP 8-127337 A (Nakanishi Metal Works Co., Ltd.), 21 May, 1996 (21.05.96), (Family: none) | 4 |
| Y | JP 5-57143 B2 (Shinko Electric Co., Ltd.), 23 August, 1993 (23.08.93), (Family: none) | 1-10 |

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

| | |
|---|--|
| * Special categories of cited documents: | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "A" document defining the general state of the art which is not considered to be of particular relevance | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "E" earlier document but published on or after the international filing date | "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "&" document member of the same patent family |
| "O" document referring to an oral disclosure, use, exhibition or other means | |
| "P" document published prior to the international filing date but later than the priority date claimed | |

| | |
|--|---|
| Date of the actual completion of the international search 09 January, 2004 (09.01.04) | Date of mailing of the international search report 27 January, 2004 (27.01.04) |
|--|---|

Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/12794

| C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|---|--|-----------------------|
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| Y | JP 2741038 B2 (Yamaha Motor Co., Ltd.), 30 January, 1998 (30.01.98), (Family: none) | 1-10 |
| Y | JP 9-216558 A (Mitsubishi Electric Corp.), 19 August, 1997 (19.08.97), (Family: none) | 1-10 |
| Y | Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 22659/1986 (Laid-open No. 137764/1987) (Murata Machinery Ltd.), 31 August, 1987 (31.08.87), (Family: none) | 1-10 |
| Y | JP 63-40052 Y2 (Sen'yo Kiko Kabushiki Kaisha), 20 October, 1988 (20.10.88), (Family: none) | 4 |